



## *X-Plain*™ *Hysterectomy*

### Reference Summary

Certain conditions that seriously affect women's health are best treated with a hysterectomy.

In Latin “hyster” means uterus and “ectomy” means removal. A hysterectomy is the surgical removal of the uterus.

Your doctor may recommend that you undergo a hysterectomy. The decision whether or not to have this operation is also yours.

This reference summary will help you better understand the benefits and risks of this surgery.

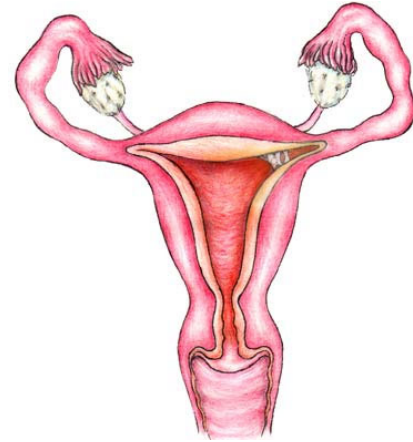
#### **Anatomy**

The female reproductive organs include:

- Vagina
- Uterus
- Fallopian tubes
- And ovaries.

These organs are located in the pelvis, between the urinary bladder and the rectum. The ovaries have two main functions.

The first is the production of specialized hormones such as estrogen and progesterone. These hormones are very important in regulating the second function of the ovaries: ovulation. Ovulation is the release of eggs, needed for reproduction. These hormones also prepare the inner lining of the uterus to proceed with a pregnancy.



When an egg is released, it goes down to the uterus through the fallopian tube, where it may be fertilized. If the egg is not fertilized, the egg and the inner lining of the uterus are discharged to the outside of the body during the menstrual period.

The uterus is pear shaped and measures approximately 3 inches in length. It has three layers. The inner layer is known as the endometrium. Once a month, if there are no pregnancies and if the ovaries are functioning correctly, it is shed to the outside of the body. This is called the menstrual period.

As menopause approaches, periods become irregular and eventually stop. Menopause occurs when the ovaries quit producing hormones and releasing eggs.

If a pregnancy occurs, the fetus stays in the uterus until delivery. The uterus is able to increase in size tremendously. The middle muscular layer of the uterus is responsible for labor contractions resulting in the baby's birth.

---

This document is a summary of what appears on screen in *X-Plain*. It is for informational purposes and is not intended to be a substitute for the advice of a doctor or healthcare professional or a recommendation for any particular treatment plan. Like any printed material, it may become out of date over time. It is important that you rely on the advice of a doctor or a healthcare professional for your specific condition.

The outer layer of the uterus is known as serosa. The lowest part of the uterus is known as the cervix, which opens into the vagina. The vagina opens to the outside between the urethra, which is the urinary bladder opening, and the rectum.

The uterus is held in place with specialized ligaments. These ligaments help prevent the uterus from slipping downward into the vagina.



The urinary bladder is located in front of the vagina and uterus. The kidneys drain the urine into the bladder through 2 specialized tubes called ureters.

The intestines and the rectum are located above and behind the vagina and uterus.

## Symptoms And Their Causes

Many conditions may result in the need for a hysterectomy, or removal of the uterus. The following are descriptions of some of these conditions. Your doctor will tell you which one applies to you.

Some conditions result in excessive menstrual bleeding that can cause significant blood loss. Significant cramps and abdominal discomfort may also accompany the menstrual cycle.

Benign tumors of the muscular layer of the uterus, known as fibroid tumors, can cause such excessive bleeding. These tumors can reach significant sizes,

causing cramping, pain, and compression on surrounding structures.

Malignant cancer may also involve the uterus lining, as well as the ovaries. The ligaments holding the uterus in place may become lax, this is called pelvic relaxation, it can cause the uterus to slip into the vagina. This is known as uterine prolapse.

The inner lining of the uterus, or endometrium, may grow abnormally in the abdominal cavity. This is known as endometriosis. This can cause scarring and pain during sexual activity or bowel movements. Endometriosis may also cause abnormal bleeding.

Adenomyosis is a condition where the endometrium, or inner lining of the uterus, grows inside the middle muscular layer of the uterus. This results in pain, cramping, and abnormal bleeding.

Infections of the uterus or the fallopian tubes can extend into the pelvic cavities resulting in a condition known as Pelvic Inflammatory Disease or PID. These infections are usually sexually transmitted. PID may cause significant pain.

## Alternative Treatments

Depending on the underlying condition, certain alternative treatments may be used before your doctor recommends a hysterectomy.

Certain conditions may respond to hormone therapy. Excessive menstrual bleeding and endometriosis are two such conditions. Other conditions may improve after menopause. For instance, fibroid tumors may shrink after menopause without the presence of estrogen.

Some conditions, however, such as cervical or endometrial cancer, are best treated with a hysterectomy. In the case of cancer, your doctor may recommend the removal of the uterus, removal

---

This document is a summary of what appears on screen in *X-Plain*. It is for informational purposes and is not intended to be a substitute for the advice of a doctor or healthcare professional or a recommendation for any particular treatment plan. Like any printed material, it may become out of date over time. It is important that you rely on the advice of a doctor or a healthcare professional for your specific condition.

of tissue surrounding the uterus, and removal of surrounding lymph nodes.

After a hysterectomy, a woman can never become pregnant.

It is therefore very important to discuss this issue with your gynecologist prior to the surgery if you think you may want to become pregnant in the future.

A hysterectomy does not affect sexual sensations. Sexual activity can be resumed within weeks and can be as pleasurable as it was before the operation.

Sexually transmitted diseases can still occur. It is therefore very important to practice safe sex, even after this operation.

### Procedure

The aim of the surgery is to take the uterus out. Sometimes the surgeon may decide to also take one or both ovaries out along with the fallopian tubes. This is known as hysterectomy and salpingo-oophorectomy. “Salpinx” means fallopian tube in Latin; “oopho” means ovary in Latin, and “ectomy” means removal in Latin.



The operation can be done through the abdomen, known as abdominal hysterectomy. It can also be done through the vagina, known as a vaginal hysterectomy.

In the abdominal hysterectomy, one of two types of incisions is used. The incision can either be vertical in the midline, going up and down, or it can be transverse, known as a “bikini” incision.

Both incisions usually heal well with very little scarring. The surgeon will discuss with you which incision he or she is planning on using. The incisions in a vaginal hysterectomy are inside the vagina and do not show on the outside of the body.

The surgeon may also decide to take out the ovaries and fallopian tubes. A catheter is usually placed in the bladder during the operation to drain the urine.

After waking up, the patient is allowed to recover in the hospital for a few days.

### Risks And Complications

This procedure is very safe. There are however, several possible risks and complications. These are very unlikely, but possible. You need to know about them just in case they happen. By being informed, you may be able to help your doctor detect complications early.

The risks and complications include those related to anesthesia and those related to any type of surgery. Risks related to anesthesia include, but are not limited to: heart attacks, strokes, and pneumonia. These risks will be discussed with you in detail by your anesthesiologist.

Blood clots in the legs can occur. These usually show up a few days after surgery. They cause the leg to swell and hurt.

These blood clots can get dislodged from the legs and go to the lungs where they will cause shortness of breath, chest pain, and possibly death.

Sometimes the shortness of breath can happen without warning. It is therefore extremely important to let your doctors know if any of these symptoms occur. Getting out of bed shortly after

---

This document is a summary of what appears on screen in *X-Plain*. It is for informational purposes and is not intended to be a substitute for the advice of a doctor or healthcare professional or a recommendation for any particular treatment plan. Like any printed material, it may become out of date over time. It is important that you rely on the advice of a doctor or a healthcare professional for your specific condition.

surgery may help decrease the risk of blood clots in the legs.

Some of the risks are seen in any type of surgery. These include:

- Infection, deep or at the skin level.
- Bleeding, either during or after the operation. This may require a blood transfusion.
- A skin scar that may be painful or ugly.

Other risks and complications are related specifically to this surgery. These again are very rare. However, it is important to know about them. Rarely, structures in the pelvis and abdomen can be injured during the surgery, especially if there is significant scarring from previous surgeries, endometriosis, or pelvic inflammatory disease.

It is very rare for the tubes connecting the kidneys to the bladder, as well as the bladder itself, to be injured. However, if this does happen, another operation may be necessary and could result in the loss of a kidney.

In extremely rare situations, the intestines and the blood vessels could also be affected, necessitating another operation.

Similarly, in extremely rare situations, small nerves in the pelvis may be injured resulting in decreased sensation in the sexual organs. Rarely, this can lead to sexual dysfunction.

In abdominal hysterectomies, hernias may occur, but this is rare.

Rarely, after the operation abnormal connections between the bladder and the vagina or the rectum and the vagina may form because of the scarring.

These are respectively known as cysto-vaginal and recto-vaginal fistulae. This can cause urine or stool

to leak from the vagina. Another operation may be necessary.

Hysterectomies does not cause any weight gain.

### **After The Surgery**

After the surgery, you will be moved to a recovery area for a few hours. From the recovery area, you will then be moved to your hospital room. Your doctor will tell you how long you will stay in the hospital. This depends on your health, age, and other factors.

A tube may be put into your bladder to help empty the urine. This tube will be removed before you leave the hospital.

A gauze pack placed in the vagina during surgery is usually taken out after a few days. It is normal to have some bloody drainage from the vagina for up to 10 days.

You will need to use sanitary pads for a few weeks for the vaginal bleeding and brownish discharge. Your nurse will give you additional instructions regarding showering and eating before you are discharged from the hospital.

You will need to take short walks to help blood circulate in your legs and prevent blood clots from forming. Your diet will also be increased gradually as you feel better. After you leave the hospital, avoid lifting or bending until your incision(s) heals.

Your doctor will tell you how long it will take before your incisions are completely healed and when you can go back to work. This depends on your age, type of work, and medical condition, as well as other factors.

You can resume your sexual activities within 6 weeks. This operation will not change your sexual lifestyle and sensations.

---

This document is a summary of what appears on screen in *X-Plain*. It is for informational purposes and is not intended to be a substitute for the advice of a doctor or healthcare professional or a recommendation for any particular treatment plan. Like any printed material, it may become out of date over time. It is important that you rely on the advice of a doctor or a healthcare professional for your specific condition.

Most likely, the operation will free you from the chronic pain caused by the uterine problem. You will no longer have menstrual periods.

If you had not experienced menopause, and if both ovaries were taken out during surgery, your surgeon may discuss hormonal replacement therapy.

Premenstrual symptoms, also known as PMS, are not affected by the operation if the ovaries are not taken out.

You should call your physician in case you develop

- A fever
- A foul-smelling vaginal discharge
- Drainage from the incision
- Severe leg pain
- Any other unusual symptoms.

## **Summary**

Hysterectomy is a very safe and successful operation. It can be a positive solution for many serious conditions affecting female reproductive organs, causing pain, and bleeding.

As you have read, complications may happen. Knowing about them will help you detect them early if they happen.

---

This document is a summary of what appears on screen in *X-Plain*. It is for informational purposes and is not intended to be a substitute for the advice of a doctor or healthcare professional or a recommendation for any particular treatment plan. Like any printed material, it may become out of date over time. It is important that you rely on the advice of a doctor or a healthcare professional for your specific condition.